

WHAT IS CLAIMED IS:

1. A method for generating perceived sensory experiences comprising:
directing an acoustical signal toward a human neural cortex; and
scanning the acoustical signal across the human neural cortex.
2. The method according to claim 1, wherein the acoustical signal comprises a pulsed ultrasonic signal formed from externally supplied neural timing difference data.
3. The method according to claim 2, wherein said directing further comprises directing the pulsed ultrasonic signal to the human neural cortex to modify a firing rate of neural tissue therein.
4. The method according to claim 1, wherein the acoustical signal is directed as an array of points.
5. The method according to claim 4, wherein the acoustical signal is scanned across the human neural cortex by expanding a radius of each of the points in the array to form an array of expanding circles.
6. The method according to claim 5, wherein the radius of each of the points in the array is expanded until touching a neighboring circle in the array of expanding circles.

7. The method according to claim 6, wherein the array of expanding circles is shifted to be centered in spaces between the array of expanding circles.
8. The method according to claim 7, wherein each of the circles in the shifted array of circles is then contracted until reaching a center point.
9. The method according to claim 1, wherein the acoustical signal is directed as a predetermined pattern.
10. The method according to claim 9, wherein the acoustical signal is scanned across the human visual cortex by modifying the predetermined pattern to cover an entire region of the human visual cortex over a predetermined time period.
11. The method according to claim 1, wherein the acoustical signal is directed towards the human visual cortex as a pattern of concentric circles.
12. The method according to claim 1, wherein the acoustical signal is scanned across the human visual cortex by expanding each of the concentric circles in the pattern until reaching a size of a next larger neighbor.
13. A method for generating perceived sensory experiences comprising:
directing an acoustical signal to a human neural cortex to form a first array of a points on the visual cortex tissue; and

modifying the acoustical signal to expand each of the points in the first array in a circle about each point until each of the circles touches one or more neighboring circles in the visual cortex tissue.

14. The method according to claim 13, further comprising:

adjusting the acoustical signal to move a center of each of the circles in the first array to one or more locations in unaffected tissue in the visual cortex to form a second array of circles.

15. The method according to claim 14, further comprising:

modifying the acoustical signal to contract each of the circles in the second array about a new center point until reaching a dot at the new center point.

16. The method according to claim 13, wherein the acoustical signal comprises a pulsed ultrasonic signal formed from externally supplied neural timing difference data.

17. The method according to claim 16, wherein said directing further comprises directing the pulsed ultrasonic signal to the human neural cortex to modify a firing rate of neural tissue therein.

18. A method for generating perceived sensory experiences comprising:

directing an acoustical signal to a human neural cortex to form a first array of concentric circles on the visual cortex tissue;

modifying the acoustical signal to expand each of the circles in the first array of concentric circles about its center until each of the circles achieves a size approximately that of an original neighbor concentric circles in the visual cortex tissue.

19. The method according to claim 18, further comprising:
repeating or reversing the modifying and directing steps.

20. The method according to claim 18, wherein the acoustical signal comprises a pulsed ultrasonic signal formed from externally supplied neural timing difference data.

21. The method according to claim 20, wherein said directing further comprises directing the pulsed ultrasonic signal to the human neural cortex to modify a firing rate of neural tissue therein.